



# TWNIC Update

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# Outline

- TWNIC IPv6 Promotion and Activities
  - Taiwan Government's Initiative to deploy IPv6
  - TWNIC's IPv6 Training in 2012
  - IPv6 Technician Assessment
  - 2012 Global IPv6 Summit and The 19<sup>th</sup> TWNIC IP Open Policy Meeting
  - IPv6 Transition Implementation Technical Manual
- IPv4 address transfer policy
- Summary

# Taiwan Government's Initiative to deploy IPv6 (IPv6 UP Program)



- Motivation

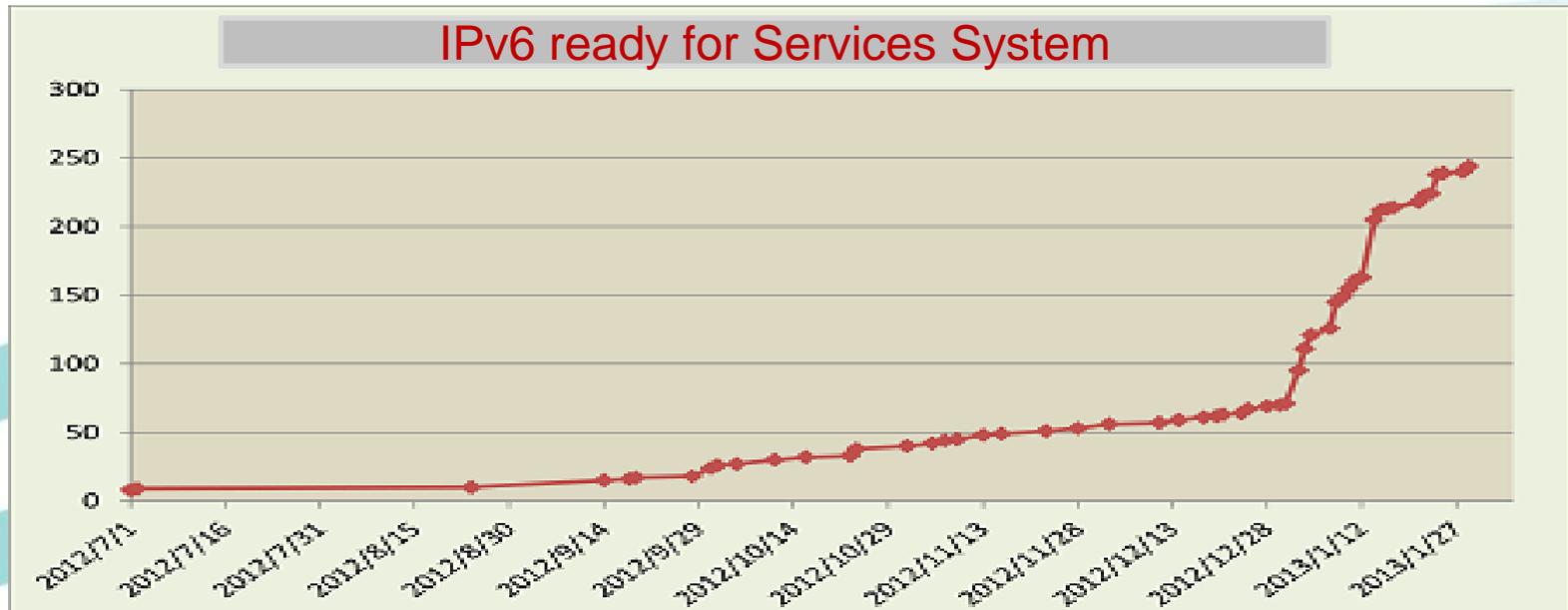
- Facing the fact of IPv4 address exhaustion and the rapid growth of IPv6 services, let government be the driving wheel of IPv6 upgrade

- Smoothly upgrade Government's service to IPv6

- *Upgrade the first half of public network services (Web, DNS, Email) to be dual stack enabled on 2013*
- *Upgrade the second half of public network services to be dual stack on 2015*
- **<https://www.gsnv6.tw/inventory>**

# Government's IPv6 ready for Service Systems

- The Government's IPv6 Service Systems are 5,279 totally. There are 257 Service Systems for IPv6 ready(5%) till now.
- The growth of IPv6 ready services is slowly in last year because the government's IPv6 access service is not ready. But in this year, the government's IPv6 access service is ready. The IPv6 services growth rapidly.



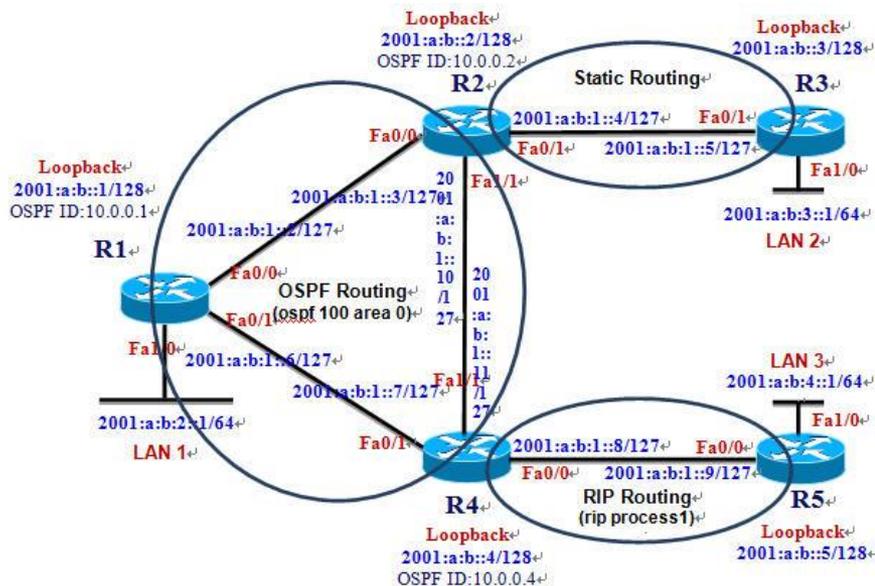
# TWNIC's IPv6 Training Program in 2012



	Course	Period	Times	Implement	Attendees
<b>Introduction Program</b>	IPv6 Basic Technology	Mar. to Aug. 1 day training	11	11	1,349
	IPv6 Advanced Technology	May. to Sep. 1 day training	8	6	1,182
<b>Hands on Program</b>	IPv6 Routing and Firewall	Apr. to Nov. 1 day training	14	7	163
	Windows Server	Apr. to Nov. 1 day training	14	7	155
	Linux Server IPv6	Apr. to Nov. 1 day training	14	6	131
<b>Special Program</b>	By request	Jul. 2 day Training	2	4	172
<b>Total</b>			<b>65</b>	<b>41</b>	<b>3,152</b>

# IPv6 Technician Assessment Program

- We held the IPv6 Technician hands-on assessment on Nov. 2012.
- The scope of exam covered to upgrade IPv6 on Windows server, Linux server and IPv6 routing.
- There were 104 attendees to join it.

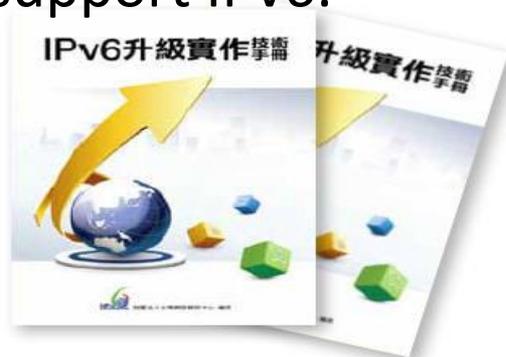


## 2012 Global IPv6 Summit and The 19<sup>th</sup> TWNIC IP Open Policy Meeting

- Annual technical conference with 300 attendees
- IPv6 Transition Technologies , IPv6 security , IPv6 measurement, etc
- In conjunction with the conference event, awards were given to outstanding organizations regarding their successful IPv6 Upgrade. There were 29 awarded organizations with excellent performance.

# IPv6 Transition Implementation Technical Manual

- TWNIC has published “IPv6 Transition Implementation Technical Manual”.
- This manual is jointly compiled by TWNIC , IPv6 program office and experts from the Internet industry to assist government bodies, industry, and individuals to accelerate their IPv6 transition plan.
- This manual highlights basic concepts, such as IPv6 addressing, steps to upgrade to IPv6 network, Internet application such as, website, Email, DNS, FTP, Internet security, and how to activate home routers to support IPv6.



# IPv4 Address Transfer Policy

- Implement in October, 2012.
  - Between TWNIC account holders
  - There is no any case until now.
  - For transfers with APNIC, other RIRs or NIRs will be future for consideration of TWNIC account holders.
  - The detail information
    - <http://www.twnic.net/ip/back.htm>

# Summary

- TWNIC currently focus on raising skills of operators in Taiwan by trainings, promotion and conferences in IPv6 area
- Facing IPv4 address exhaustion, we focus on IPv4 Transfer policy as issues to handle in the transition phase

# Q&A

